Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-25. (Canceled)

26. (Previously Presented) A method of manufacturing a gas diffusion electrode, the method comprising:

forming an active layer by agglomerating a first powder mixture with PTFE particles in a dry form to produce a first dry agglomerate, adding a first organic solvent to the first dry agglomerate to produce a first paste, and calendering the first paste to form the active layer;

forming a gas diffusion layer by agglomerating a second powder mixture with PTFE particles in a dry form to produce a second dry agglomerate, adding a second organic solvent to the second dry agglomerate to produce a second paste, and calendering the second paste to form the gas diffusion layer; and

pressing the active layer with the gas diffusion layer and a current collector to form a gas diffusion electrode.

27. (Previously Presented) The method of claim 26, wherein the steps of forming an active layer and forming a gas diffusion layer are performed in parallel prior to the step of pressing the active layer with the gas diffusion layer.

28. (Previously Presented) The method of claim 26, wherein the steps of forming an active layer and forming a gas diffusion layer are each performed in continuous processes.

29. (Previously Presented) The method of claim 26, further comprising extruding the first paste and the second paste prior to calendering.

30. (Previously Presented) The method of claim 26, wherein said agglomerating is carried out using a ball mill.

31. (Currently Amended) The method of claim 30, wherein said agglomerating comprises ~~agglomerating comprises~~ mixing for more than 30 minutes.

32. (Previously Presented) The method of claim 26, wherein said agglomerating comprises using a blender with blades rotating at between 1,000 and 3,000 rpm.

33. (Previously Presented) The method of claim 32, further comprising heating the first and second powder mixtures to a temperature between 50 and 200 degrees Celsius prior to said agglomerating.

34. (Previously Presented) The method of claim 32, wherein said agglomerating comprises mixing the first and second powder mixtures with PTFE particles for at least 1 minute.

35. (Previously Presented) The method of claim 26, wherein said agglomerating comprises using a high-speed mill with rotating blades which rotate at more than 10,000 rpm.

36. (Previously Presented) The method of claim 26, wherein said adding a first organic solvent comprises stirring the first dry agglomerate during the addition of the organic solvent.

37. (Previously Presented) The method of claim 36, further comprising heating the first dry agglomerate during said stirring.

38. (Previously Presented) The method of claim 26, wherein said pressing the active layer with the gas diffusion layer and a current collector comprises calendering the current collector with the active layer and the gas diffusion layer.

39. (Previously Presented) The method of claim 26, wherein the first powder mixture is 100 weight percent graphite.

40. (Previously Presented) The method of claim 26, wherein the first powder mixture comprises 25-75 weight percent graphite with platinum and 25-75 weight percent graphite.

41. (Previously Presented) The method of claim 26, wherein the first powder mixture comprises 25-75 weight percent graphite with Ag, Co, Fe, perovskites or spinels and 25-75 weight percent graphite.

42. (Currently Amended) The method of claim 26, further comprising adding PTFE particles having particle sizes less than 1 mm to the first powder mixture before said agglomerating.

43. (Previously Presented) The method of claim 26, wherein the second powder mixture comprises 55-75 weight percent activated carbon or graphite and 25-45 weight percent PTFE.

44. (Previously Presented) The method of claim 26, further comprising drying the gas diffusion electrode at a temperature less than 40 degrees Celsius.

45. (Previously Presented) A method of producing a gas diffusion electrode, the method comprising:

forming an active layer and a separate gas diffusion layer using separate processes that each comprise agglomerating a powder mixture with PTFE particles in a dry form to produce a dry agglomerate, adding an organic solvent to the dry agglomerate to produce a paste, and calendering the paste;

combining the active layer and the gas diffusion layer with a current collector to form a gas diffusion electrode.

46. (Previously Presented) The method of claim 45, wherein the step of combining the active layer and the gas diffusion layer with a current collector comprises calendering the current collector with the gas diffusion layer and then combining the gas diffusion layer with the current collector.

47. (Previously Presented) The method of claim 46, wherein the step of combining the gas diffusion layer with the current collector comprises calendering the gas diffusion layer and the current collector.

48. (Previously Presented) The method of claim 45, wherein the steps of forming an active layer and forming a gas diffusion layer are performed in parallel prior to the step of combining the active layer and the gas diffusion layer with a current collector.

49. (Previously Presented) The method of claim 45, wherein the steps of forming an active layer and forming a gas diffusion layer are each performed in continuous processes.

50. (Previously Presented) The method of claim 45, wherein the process used to form at least one of the active layer or the gas diffusion layer further comprises extruding the paste prior to calendering the paste.

51. (Previously Presented) The method of claim 45, wherein said agglomerating is carried out using a ball mill and mixing for more than 30 minutes.

52. (Previously Presented) The method of claim 45, wherein said agglomerating comprises using a blender with blades rotating at between 1,000 and 3,000 rpm for at least 1 minute, and further comprising heating the powder mixture to a temperature between 50 and 200 degrees Celsius prior to said agglomerating.

53. (Previously Presented) The method of claim 45, wherein said agglomerating comprises using a high-speed mill with rotating blades which rotate at more than 10,000 rpm.

54. (Previously Presented) The method of claim 45, further comprising stirring the dry agglomerate during the addition of the organic solvent.

55. (Previously Presented) The method of claim 54, further comprising heating the dry agglomerate during said stirring.

56. (Previously Presented) The method of claim 45, wherein the powder mixture used to form the active layer is 100 weight percent graphite.

57. (Previously Presented) The method of claim 45, wherein the powder mixture used to form the active layer comprises 25-75 weight percent graphite with platinum and 25-75 weight percent graphite.

58. (Previously Presented) The method of claim 57, wherein the powder mixture used to form the gas diffusion layer comprises 55-75 weight percent activated carbon or graphite and 25-45 weight percent PTFE.

59. (Previously Presented) The method of claim 45, wherein the powder mixture used to form the active layer comprises 25-75 weight percent graphite with Ag, Co, Fe, perovskites or spinels and 25-75 weight percent graphite.

60. (Previously Presented) The method of claim 59, wherein the powder mixture used to form the gas diffusion layer comprises 55-75 weight percent activated carbon or graphite and 25-45 weight percent PTFE.

61. (Currently Amended) A method of forming a gas diffusion electrode comprising a gas diffusion layer and an active layer, the gas diffusion layer and the active layer each formed from a paste created from a mixture of a powder mixture and PTFE particles and being manufactured in separate processes that each comprise agglomerating a powder mixture with PTFE particles in a dry form to produce a dry agglomerate, adding an organic solvent to the dry agglomerate to produce a paste, and calendering the paste.

62. (Currently Amended) The ~~gas diffusion electrode~~ method of claim 61, further comprising calendaring a current collector ~~calendered~~ with the gas diffusion layer and the active layer.

63. (Currently Amended) The ~~gas diffusion electrode~~ method of claim 61, wherein the active layer and gas diffusion layer are produced in parallel continuous manufacturing operations and further comprising calendering the active layer with the gas diffusion layer to form the gas diffusion electrode.

64. (Currently Amended) The ~~gas diffusion electrode~~ method of claim 61, wherein the process used to form at least one of the active layer or the gas diffusion layer further comprises extruding the paste prior to calendering the paste.

65. (Currently Amended) The ~~gas diffusion electrode~~ method of claim 61, wherein said agglomerating is carried out using a ball mill, a blender with blades rotating at between 1,000 and 3,000 rpm, or a high-speed mill with rotating blades which rotate at more than 10,000 rpm.

66. (Currently Amended) The ~~gas diffusion electrode~~ method of claim 61, wherein the processes for manufacturing the gas diffusion layer and the active layer each comprise stirring the dry agglomerate during the addition of the organic solvent and heating the dry agglomerate during said stirring.

67. (Currently Amended) The ~~gas diffusion electrode~~ method of claim 61, wherein the gas diffusion layer comprises 55-75 wt % activated carbon or graphite and 25-45 wt % PTFE and the active layer comprises 25-75 wt % activated carbon or graphite with noble or non-noble metal catalyst, 25-75 wt % activated carbon or graphite having a surface area of more than 100 m^2/g, and 5-20 wt % PTFE.

68. (Currently Amended) The ~~gas diffusion electrode~~ method of claim 61, wherein the powder mixture used to form the active layer comprises 25-75 weight percent graphite with platinum and 25-75 weight percent graphite.

69. (Currently Amended) The ~~gas diffusion electrode~~ method of claim 61, wherein the powder mixture used to form the active layer comprises 25-75 weight percent graphite with Ag, Co, Fe, perovskites or spinels and 25-75 weight percent graphite.